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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,696

08/01/2006

Kazuya Katoh

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POSZ LAW GROUP, PLC  
12040 SOUTH LAKES DRIVE  
SUITE 101  
RESTON, VA 20191

EXAMINER

ANGEBRANNDT, MARTIN J

ART UNIT

PAPER NUMBER

1795

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,696	<b>Applicant(s)</b> KATOH ET AL.	
	<b>Examiner</b> Martin J. Angebrannt	<b>Art Unit</b> 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10/18/05 & 8/1/06.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims should specify the temperature at which the modulus is measured. The prepub of the instant specification teaches 25 degrees C at [0121 and 0126] and the examiner suggests adding this language to both modulus values.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Dobashi et al. JP 2002-241711.

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Dobashi et al. JP 2002-241711 teaches in example 2, the mixture of acrylic resins 1 and 2 in amounts of 80:20 but otherwise like example 1, which includes an irgacure photoinitiator. [0035,0024-0029]. Resin A begins with 70 parts n-butyl acrylic acid, 20 parts ethyl acrylate and 10 parts hydroxyethyl acrylic acid and heated with azo-isobutyrodinitrile and 2-hydroxyethyl methacrylic acid and dibutyltin dilaurate resulting in an unsaturated bond in the side chain and a MW of 310,000 [0024-0027]. Resin B begins with 80 parts methylmethacrylate, 20 part acrylic acid, 5 parts azo-isobutyrodinitrile which is heated and 2-hydroxyethyl methacrylic acid and dibutyltin dilaurate resulting in an unsaturated bond in the side chain and a MW of 18,000 [0028-0029]. Example 1 has a precure storage modulus at 20 degrees C of  $1.2 \times 10^6$  Pa and at 80 Degrees C of  $1.5 \times 10^4$  Pa and after cured has a modulus at 80 degrees C of  $6.1 \times 10^5$ . Example 2 has a precure storage modulus at 20 degrees C of  $1.0 \times 10^6$  Pa and at 80 Degrees C of  $1.0 \times 10^4$  Pa and after cured has a modulus at 80 degrees C of  $5.9 \times 10^5$ .

The position of the examiner is that the storage modulus after curing is within the recited range for some temperature and that would be in the 20-25 degrees C range based upon the relationship of the storage modulus taught. The examiner holds that 2-hydroxyethyl methacrylic acid is a multifunctional monomer (one acrylic moiety and one hydroxyl moiety). The claims do not require that the multifunctional monomer/oligomer have multiple acrylate moieties but include other reactive sited prepub at [0052-0053].

6. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being fully anticipated by Yamasaki et al. '174

See the data in table 1.

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7. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Kubota et al. 513.

The resin composition of examples 1 used as stamper receiver layer has a precure elastic modulus of  $1.4 \times 10^4$  Pa and after curing has a values of  $6.0 \times 10^8$  Pa. Examples 2 has a precure elastic modulus of  $1.61 \times 10^4$  Pa and after curing has a values of  $3.2 \times 10^8$  Pa. [0098-0099].

The substrate to which it is applied is considered a protective layer for claim 8 and for claims 8 and 9 the protective layer is adhered to the optical disk substrate via the stamping layer and therefore it is an adhesive layer within the scope of the cured product, noting the claims do not preclude other layers being between the protective layer and the adhesive layer.

8. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Noguchi et al. '578.

See examples including resins A or B and oligomers E1 or E2

The use in optical recording media is an intended use. The examiner holds that for at least some temperature(s), the storage modulus is met. The materials inherently have the side chains and oligomers E1 and E2 are multifunctional with E2 being a urethane acrylate like the Seika-beam 14-29B.

9. Claims 1-5 and 8 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Takahasi et al. '330.

See examples 1-3 in table 1 and the compositions used.

The use in optical recording is an intended use. The examiner holds that for at least some temperature(s), the storage modulus is met. The materials inherently have the side chains.

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

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improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1-9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 7005174. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 7 recited the range prior to curing and a lower limit for the range after curing which embraces that of the instant claims. See also claim 9-12.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J. Angebrannndt whose telephone number is 571-272-1378. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Martin J Angebranndt/  
Primary Examiner, Art Unit 1795

Martin J Angebranndt  
Primary Examiner  
Art Unit 1795

3/5/09